Abstract for Workshop on Spectroscopy of Comets with ROSETTA Convened by A. Coradini and M.C. Sanctis

MIRO - Science Objectives and Observation Strategies

S. Gulkis¹, M. Allen¹, G. Beaudin², D. Bockelee-Morvan², J. Crovisier², D. Despois³, P. Encrenaz², T. Encrenaz², M. Frerking¹, P. Hartogh⁴, M. Hofstadter¹, W.H. Ip⁴, M. Janssen¹, E. Lellouch², I. Mann⁴, D. Muhleman⁵, H. Rauer⁴, F. P. Schloerb⁶, T. Spilker¹

¹Jet Propulsion Laboratory, California Institute of Technology, ²Observatoire de Paris-Meudon, ³Observatoire de Bordeaux, ⁴Max Planck Institute fur Aeronomie(Landau), ⁵California Institute of Technology, ⁶University of Massachusetts

The Microwave Instrument for the ROSETTA Orbiter (MIRO) will measure continuum temperatures at two wavelengths (1.59 mm and 0.53 mm) and very high spectral resolution measurements of water, carbon monoxide, ammonia, and methanol. The results from MIRO are expected to be highly complementary to those of other experiments on ROSETTA, including those obtained from ALICE, VIRTIS, and OSIRIS. It is anticipated that overall scientific productivity of the ROSETTA Mission will be enhanced when the results of all the instruments are considered collectively. Coordinated measurements may be pursued to enhance the results of each separate instrument. This paper will present the scientific objectives of MIRO and identify areas of overlap between MIRO and other instruments on ROSETTA.

Paper to be presented by S. Gulkis